CURRICULUM VITAE

Edwine Benson Atitwa, PhD

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THEMATIC EXPERTISE

Edwine B. Atitwa a Senior Lecture, Biostatistician and a chairman of Mathematics & Statistics department, University of Embu -Kenya. He holds a PhD (Bio-statistics) and MSc (Social Statistics) from Moi University and University of Nairobi -Kenya respectively. He is a dedicated educator and researcher, recognized as an expert in the field of Statistics. His commitment lies in advancing scientific knowledge, mentoring future scientists, and promoting interdisciplinary research. Dr. Atitwa work primarily focuses on Applied Statistics, Data Analytics, Machine Learning and Biostatistics with applications in Healthcare, Agriculture, Education and Social sciences. He collaborates with both academia and industry partners to tackle real-world challenges using statistical tools. Dr. Atitwa has published more than Forty (40) articles in internationally refereed Journals and supervised three (3) PhD and many MSc scholars to completion and graduation. Dr. Atitwa is a statistical modeler, data euthanistic, Certified Public Accountant(S.2)and member of International Biometric Society (IBS).He is currently pursuing postgraduate Diploma in Learning Design and Technology at Open University of Kenya.

WEBSITE/PORTFOLIO

Google Scholar
LinkedIn.com

SKILLS

- Statistical Analysis using
- SPSS, Python, R &
- Rstudio
- Data Visualization using
- Power BI, SQL, Tableau,
- R, Python
- Dashboard Design and
- Development Process
- using Business intelligent
- tools
- Machine Learning and
- Deep Learning
- Data Analytics Expert and
- Consultant
- Monitoring & Evaluation
- WASH

ACCOMPLISHMENTS/ACHIVEMENTS

- FULL SCHOLARSHIP AWARD to 1 PhD: Sponsorship for long term Training-Food Systems Resilience Project (2024-2027) under my Support and guidance.
- **PUBLICATIONS:** Forty (40) publications in internationally refereed Journals: Google Scholar

EDUCATION

1.Moi University
Eldoret, Kenya
Doctor of Philosophy: PhD. (Biostatistics),2019

2.University of Nairobi,
Nairobi, Kenya
Master of Science: MSc.

- **POST GRADUATE SUPERVISION:3** PhD and 25 MSc
- scholars to completion and graduation
- **ATTENDANCE AND CONTRIBUTION:** Seven (7) international conferences/workshops/seminars in Kenya
- **MEMBER**: International Biometric Society (IBS).

(Social Statistics),2011

3. University of Nairobi
Nairobi, Kenya
Bachelor of Education:
(Honours)
2005

4. KASNEB
Nairobi, Kenya
Certified Public Accountant:
CPA (S.2)
2004

EXPERIENCE

International Linkages

• **Member-** International Biometric Society, Washington DC &Kenya chapter,

Committee Involvement

• **Member**-Staffs Sports Committee, University of Embu
• Member- Staffs Awards Committee, University of Embu
• Member- Internally Funded Scholarship Evaluation Committee, University of Embu
• Member- Ad-hoc committee on the development of a framework for addressing incomplete student examination records, University of Embu
Harmonization of Performance Targets for Teaching Staff Committee

Academic Role

• **Position**-PhD (Statistics) Coordinator, University of Embu

Senior Lecturer of Statistics

University of Embu | Embu, Kenya | July 2026 - Current
• Teaching and evaluation of undergraduate and postgraduate students.

External Examiner (PhD & Msc, Thesis)

Machakos University | Machako, Kenya | July 2026 - Current
• Teaching and evaluation of undergraduate and postgraduate students.

COD-Department of Mathematics & Statistics

University of Embu | Embu, Kenya | July 2026 - Current
• Teaching and evaluation of undergraduate and postgraduate students.
Allocating responsibilities and duties to staffs at the department
Representing department at school level and Senate
Recruitment and staff development at the department with the help of HR

PROFESSIONAL TRAINING AND QUALIFICATION

2025: Process Owners
And ISO Champions

2022: Applied Data Science Lab, World Quant University

2022: Data Analysis Using R programming language, RUFORUM

2017: Open data Kit (ODK), Kemri Kisumu

2012: EBCL (European Business Competency Licence),UK in Collaboration with Institute of advanced Technology, Kenya

2010: Certificate in oracle administration 10g.

2010: SPSS, Advanced excel, R, S plus, Stata and gretl, Institute of Advanced Technology, Kenya

2009: Certificate in scientific writing and communication.

2008: Certificate in IT support and Networking

2008: Certificate of Competence in Teaching for Understanding

Budgeting for the department
Handling all academic matters for the department.
Acting Director, Academic Quality Assurance may 2024

Lecturer (Statistics)

University of Embu | Embu, Kenya | Sep 2019 - June 2026

Internal Examiner (PhD & MSc Thesis)

University of | Embu , Kenya | January 2020 - Current
• Conducted thorough evaluation of students' dissertations to maintain high academic standards.
• Reviewed and assessed coursework, ensuring alignment with university grading policies.

2007: Certificate in programming and Web design

2006:ICDL (International Computer driving Licence), South Africa

Data Analytics Expert and Consultants

Freelance | September 2011 - Current
- Data Analysis
- Machine Learning
- Generative AI modeling
- Data Visualization
- Statistical Modeling
- Report Writing

Board Member

- Directorate of e-learning(ODEL), University of Embu | October 2025 –Current
- Directorate of Practicum, University of Embu | October 2025 -Current

ACADEMIC LEADER

University of Embu | Embu, Kenya | July 2026 - Current
- Coordinated the development and launch of new degree 9
programmes, assessing market demand and securing necessary approvals.

Record of Employment

- Jan 2026-Present Full Time Senior Lecturer, University of Embu
- Sept 2019-Sep 2025 Full time lecturer, University of Embu
- 2011-August 2019Part-time and full time lecturer, Assistant Lecturer, Lecturer, H.O. D, IAT, Moi, Mt. Kenya, St. Pauls, PACU, Maseno, Kemu, Masai Mara, and Gluk(Full time).
- 2017– Feb 2019 Core PI/Data manager and Analyst, M2M Study, Great Lakes University of Kisumu
- 2016– Feb 2019 Monitoring, Evaluation & Learning Officer, SHARE II, Great Lakes University of Kisumu.
- 2006-2016 Head of Department, Trainer, IRD officer and quality assurance officer, Institute of Advanced Technology (IAT), Kenya.

PEER REVIEWER MEMBER

American Journal of Theoretical & Applies Stats, | January 2016 today
Taylor & Francis | May 2026 to date

RESEARCH GRANTS

- Market to Mouth contamination of infant food(M2M) in Nyalenda by International Food and Policy Research institute (IFPRI) ,$91,000,218-2019

ADMINISTRATIVE RESPONSIBILITIES

1.Appointment By VC,University of Embu:
- August,2026 to date-Chairman MOU between Statistical Society of Kenya and UOEM
- March-December 2026,Team Leader and for Conference

- Feasibility Study, Don-Bosco Embu,USD 500,February 2022

SELECTED PUBLICATIONS:

1. Saoke, V. O., Gitonga, C. M., Ndwiga, Z. N., Atitwa, E. B., & Musafiri, C. M. (2026). Generation differences in awareness and adoption of technology enhanced anticipatory sets among teachers in Kenya. *Discover Education*.
2. Sindiga, E. C., Morris, Z. N., Nyakundi, C., & Atitwa, E. B. (2026). Evaluating the Effects of Dairy Feed Types and Sequences on Milk Yield and Quality Using a 3× 3 Crossover Design with Random Cow-Level Variability. *management*, *13*, 4.
3. Kamau, B. K., Atitwa, E. B., & Mwithiga, G. (2026). Modeling and optimization of quality indicators of blanched and dried cowpea leaves by Response Surface Methodology (RSM). *Heliyon*, *12*(4).
4. Kiluyi, J., Atitwa, E., Mugweru, J., Odhiambo, J., & Ngari, P. M. (2026). Integrated Determinants of Tuberculosis Treatment Outcomes: A Comprehensive Analysis of Demographic, Clinical, and Behavioral Factors. *IAENG International Journal of Applied Mathematics*, *56*(1), 426-444..
5. Mugambi, J. M., Morris, Z. N., Atitwa, E. B., & Othiambo, R. (2026). Integrating Time-Varying Birth–Death Models and Machine Learning for Interpretable Prediction of Cervical Cancer Progression. *IAENG International Journal of Applied Mathematics*, *56*(1), 221-236..
6. Mbithi, J. N., Atitwa, E. B., Morris, Z. N., & Anapapa, A. O. (2026). Overdispersion and Zero-Inflation in HIV Surveillance Data: Comparative Analysis of Classical Count Models. *IAENG International Journal of Applied Mathematics*, *56*(1), 1-18.

BOOK

1. Edwine Atitwa (2020). Response Surface Methodology for Milk Kefir Production. Lambert Academic Publishing. Pages 116. ISBN-

- Organizing Committee between SSK,KNBS,and UoEm
- Sept,2025 to date:Chairman of Department of Mathematics and Statistics
- April-Aug2025:Acting Chairman of Department of Mathematics and Statistics
- March-Aug 2025, School Examination Coordinator, SPAS
- Nov,2025 to date: Internally Funded Scholarship Evaluation Committee
- October 2025 to Present: Secretary to JIC for MOU between Uoem and Senckenberg Society of natural research
- October 2025 to Present: HOD Role under the EGP –System
- February 2025 to Present Auditor for Self-assessment of Academic programs
- February-October 2024: Acting Director, Academic Quality Assurance
- February 2021-March 2025 :Examination Coordinator, Department of Mathematics &Statistics

PROFESSIONAL SOCIETIES

Name of Society	Position in the Society
International Biometry Society (IBS)	Member: No:1374347

COMMUNITY SERVICE AND OTHER CONTRIBUTION

1. Chairman of Implementation Team of MOU between SSK and UoEm(August,2026-todate)

139786200535238
https://www.dymocks.com.au/book/response-surface-methodology-for-milk-kefir-production-by-edwine-atitwa-9786200535238.

REFEREES

1.Ven . Richard Keya
Vicar In Charge & Area Archdeacon
Musanda Archdeaconry
+254713187076

2. Dr. Simba Nyamato
Dean School of Pure and applied Sciences
University of Embu
nyamatosimba@gmail.com +254714712485

3. Prof. John Mutiso
Associate Professor(Statistics)
Moi University
JMutiso@moi.ac.ke
Tel No: 0715050123

2. Member in Committee to Implement MENTORSHIP PROGRAMME Between University of Embu(SPAS) and Gikurune boys Secondary School-Participated in conducting successful need assement in July,2025 todate .
3. Team Leader of MOU between Memorandum of Understanding between University of Embu and Ngagaka Water and Sanitation Company Ltd(Febraruary 2026 todate).
4. Secretary to JIC for MoU between UoEm and Wolaita Sodo University,2025 to Date
5. Secretary to JIC for MOU between UoEM and Senckenberg Society of Natural Research
6. Research Cordinator at Centre for Women Empowernment Intechnology(CWE-TECH-From February 2024 todate
7. Board Member of Eshihaka Secondary and Academic Committee Chair-person School October 2022-todate
8. Organizing Secretary UASU – Embu Chapter February 2022-August 2025